

**The invention claimed is:**

1. A flock separation method for separating flocks from a solution, comprising the steps of:

(a) preparing a container and then guiding a flock-containing solution into said container;

(b) rotating said container to produce a centrifugal force and to further cause dense flocks to be separated from the solution and gathered at the border area around the periphery of said container and light flocks to be deposited on a bottom side inside said container to form a sedimentary deposit layer;

(c) allowing said sedimentary deposit layer to catch flocks from the solution passing toward the central axis of said container and excess amount of deposited flocks to float from said sedimentary deposit layer toward the periphery of said container subject to the effect of said centrifugal force; and

(d) guiding accumulated flocks from the border area around the periphery of said container to the outside of said container and the flock-free solution from the center area of said container to the outside of said container.

2. A flock separator adapted to separate flocks from a solution, the flock separator comprising:

a container adapted to produce a centrifugal force, said

container comprising a fluid chamber adapted to hold a flock-containing solution for separation, a drain port formed in the periphery of the container for outputting separated flocks from the solution;

5           at least one lead-out tube fixedly fastened to said container and inserted into said fluid chamber and adapted to guide flock-free solution out of said container, said at least one lead-out tube each having a first opening suspended in said fluid chamber near the central axis of said container and a second  
10   opening extended to the outside of said container;

          a first annular collector extended around the periphery of said container and adapted to collect output flocks from said drain port; and

          a second annular collector extended around the  
15   periphery of said container and adapted to receive flock-free solution from the second opening of each said at least one lead-out tube.

3. The flock separator as claimed in claim 2, further comprising a drainage control unit provided at said drain port  
20   and adapted to control output of flocks from said drain port, said drainage control unit comprising a rotary friction ring in friction contact with the periphery of said container for rotation with

said container, a valve adapted to close or open said drain port to a certain extent dependent upon the speed of rotation of said rotary friction ring, a spring member, which supports said valve in the close position, and a brake adapted to impart a pressure to

5 said rotary friction ring to lower the speed of rotation of said rotary friction ring.